22. On the Blood-Parasites found in Animals in the Zoological Gardens during the four years 1908–1911. By H. G. Plimmer, F.R.S., F.Z.S., Pres.R.M.S., Pathologist to the Society.

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(Plates XLIX.–LV.*)

During the last four years I have examined the blood of every mammal, bird, reptile, and batrachian which has died in the Zoological Gardens, 6430 in all. In 447 of these, that is about 7 per cent., I have found blood-parasites. These 447 affected animals belonged to 256 different species, as in many cases the same parasite was found in several animals of the same kind.

Many of these parasites are described or recorded here for the first time; in other cases the hosts are new. In the tables which follow I have indicated those which are new, or in new hosts, by placing asterisks against the names of the animals in which they were found. In spite of much generous help from Mr. R. I. Pocock, F.R.S., Mr. Seth-Smith, and Dr. R. T. Leiper, to whom my best thanks are due, it is impossible to be quite certain that I have not given myself too much credit, partly on account of the large amount of scattered literature on the subject, and partly on account of the constant change of names of animals on the part of zoologists.

Although the importance of the study of blood-parasites has only been recognised in comparatively recent years—that is since 1880, when Laveran discovered the hæmatozoon of malaria in the military hospital of Constantine—it should be remembered that the first mention of a blood-parasite dates from 1841, when Valentin described an "entozoon"—as he called it— in the blood of a fish, *Salmo fario*. Nowadays the importance of these parasites is well recognised, as well as the necessity of studying them comparatively, since we know that many of the gravest diseases of man and of animals are caused by them. I need only mention such diseases as malaria, syphilis, sleeping-sickness, and kala-azar of man, and trypanosomiasis (in its various forms), Texas fever, and the coccidioses of animals, to remind you of this.

I have not attempted to give names to any of those parasites described here for the first time. In the present state of our knowledge it seems better to tabulate the hosts and give the general characteristics, or type, of the parasite. The custom of naming as new—very often with very absurd names—every similar parasite found in a new host is, I think, a very bad one. We can only name them reasonably when we know a great deal more about them than we do at present.

The parasitic organisms I have found in the blood of animals

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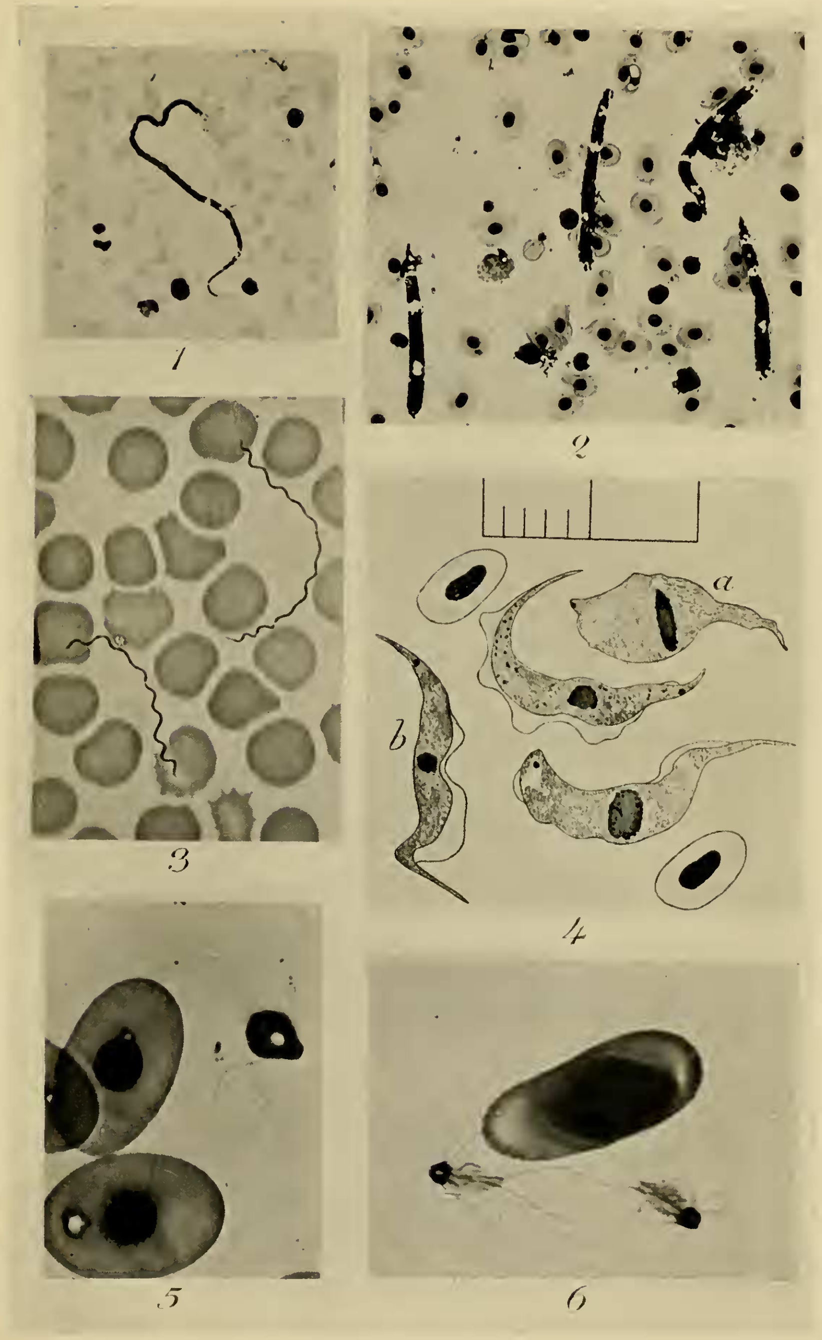
* For explanation of the Plates see p. 417.



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BLOOD PARASITES.

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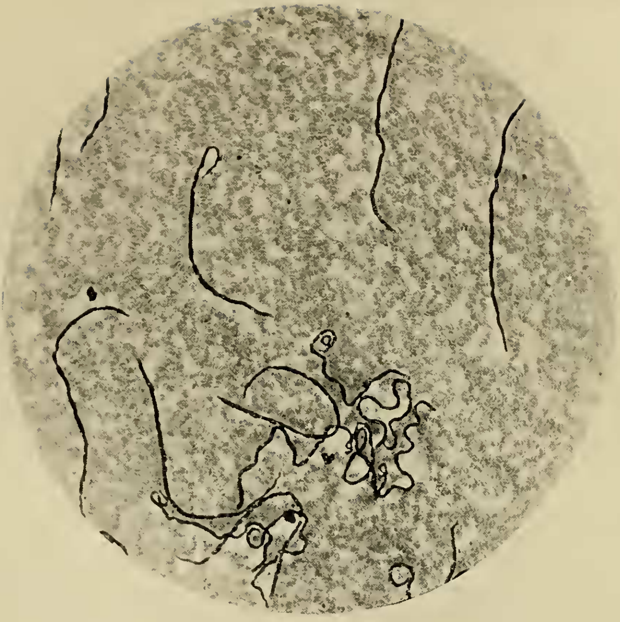

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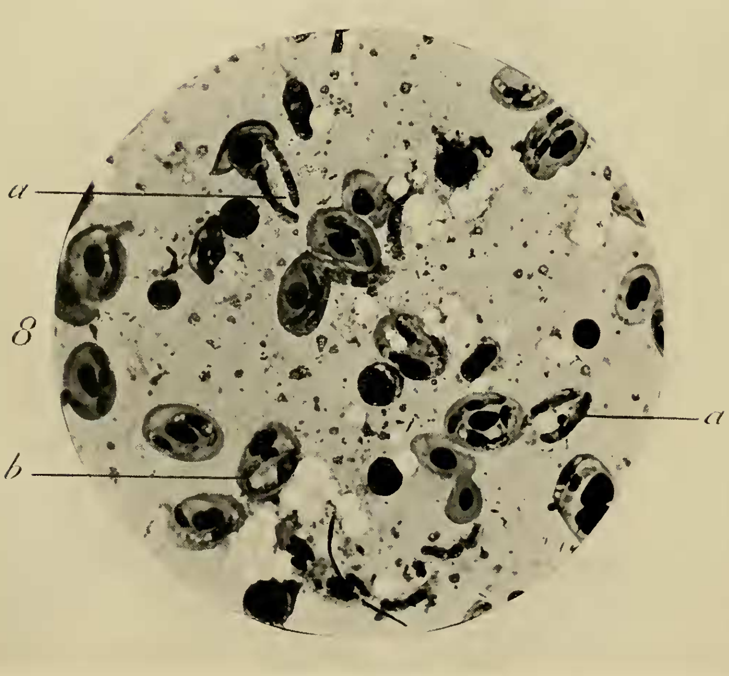

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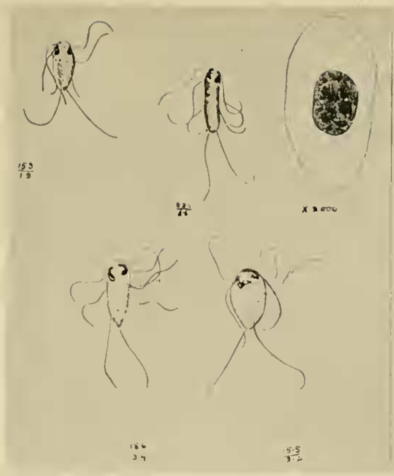

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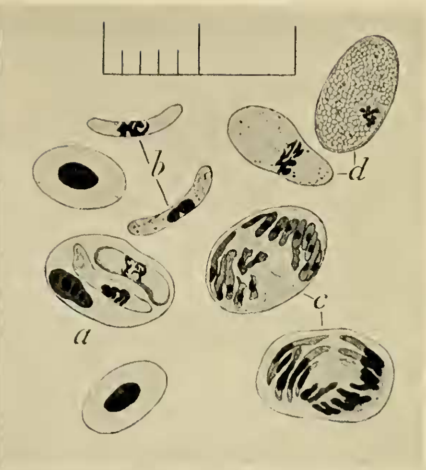

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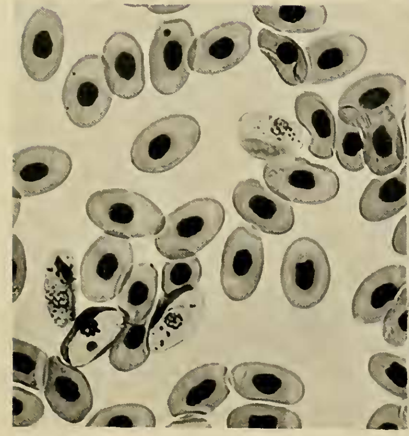

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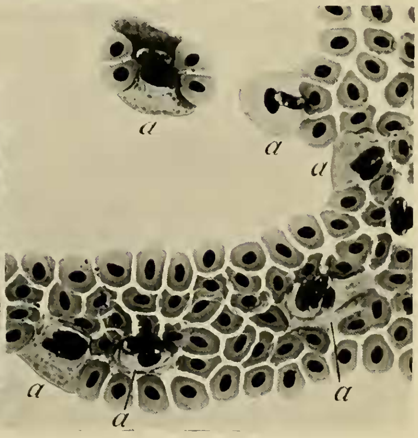

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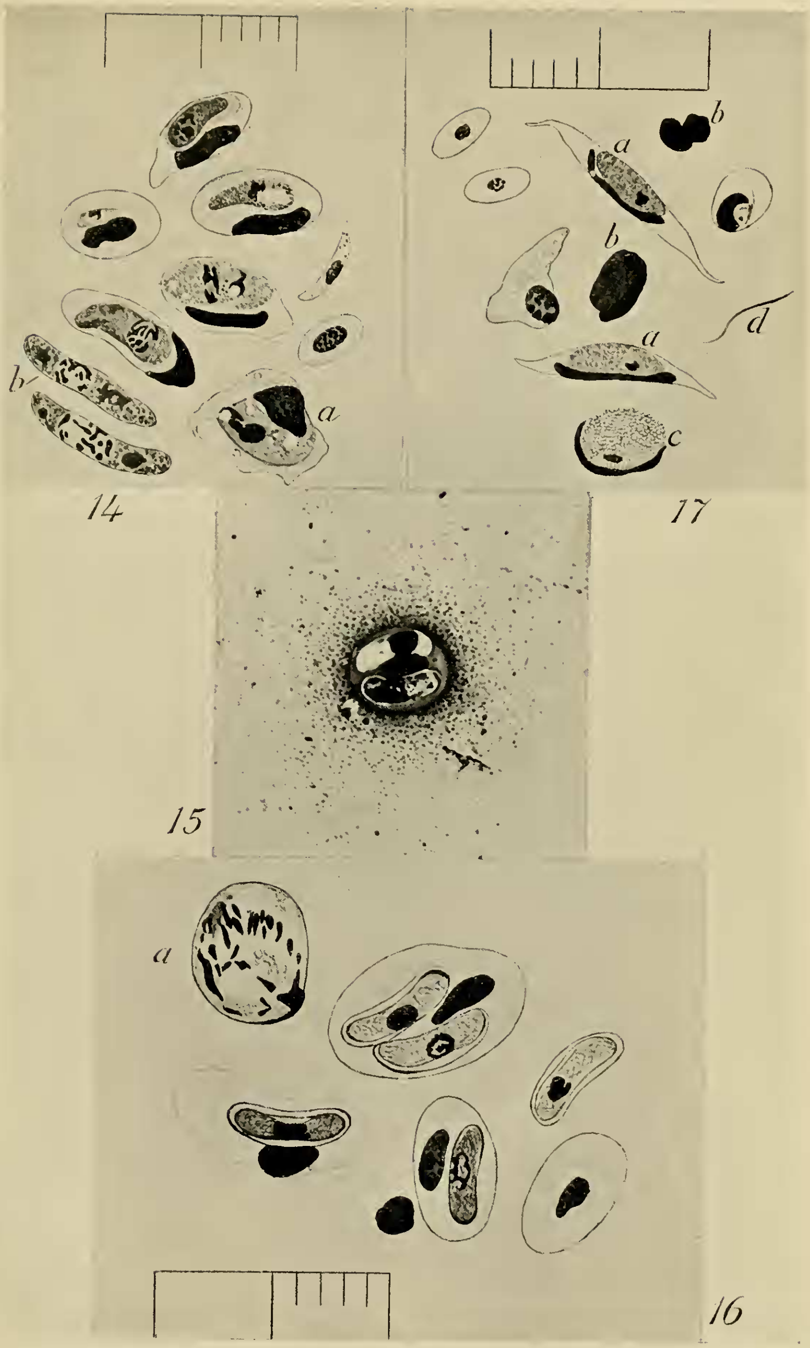

BLOOD PARASITES.

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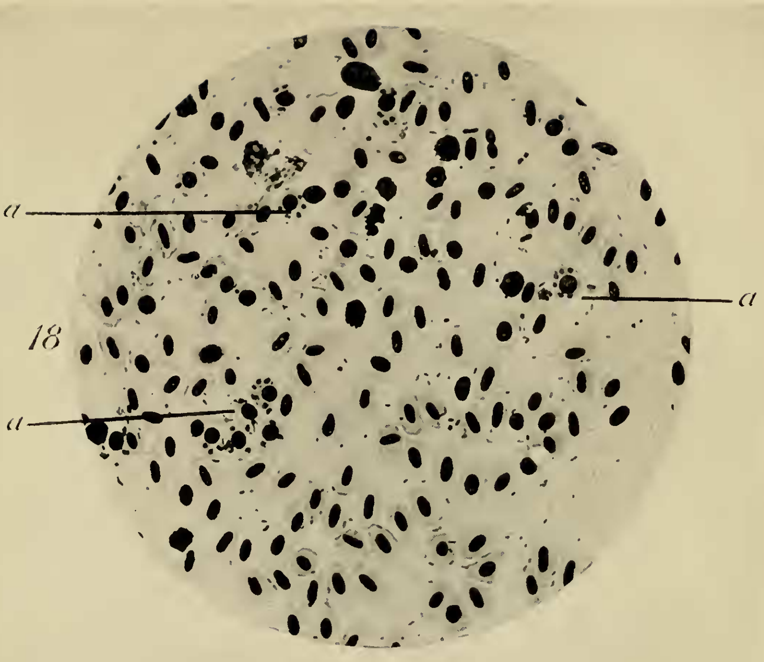

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BLOOD PARASITES.

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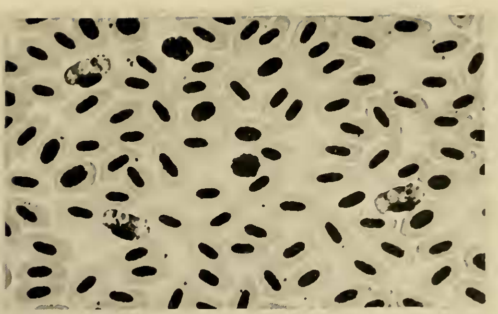

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BLOOD PARASITES.

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BLOOD PARASITES.